

HYDROGEN PASSIVATION SHUT DOWN SYSTEM FOR A  
FUEL CELL POWER PLANT

Abstract of the Disclosure

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The invention is a hydrogen passivation shut down system for a fuel cell power plant (10). An anode flow path (24) is in fluid communication with an anode catalyst (14) for directing hydrogen fuel to flow adjacent to the anode catalyst (14), and a cathode flow path (38) is in fluid communication with a cathode catalyst (16) for directing an oxidant to flow adjacent to the cathode catalyst (16) of a fuel cell (12). Hydrogen fuel is permitted to transfer between the anode flow path (24) and the cathode flow path (38). A hydrogen reservoir (66) is secured in fluid communication with the anode flow path (24) for receiving and storing hydrogen during fuel cell (12) operation, and for releasing the hydrogen into fuel cell (12) whenever the fuel cell (12) is shut down.

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